EECS 211: Fundamentals of Computer Programming II

Syllabus

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Department of Electrical Engineering & Computer Science
Northwestern University

EECS 211
Fundamentals of Computer Programming II
March 29\textsuperscript{th}, 2010
• Quarter
  – Spring 2010

• Lecture Time:
  – Monday/Tuesday/Wednesday/Friday
  – 1:00PM - 1:50PM

• Location:
  – TECH M164
Introductions

• Instructor: Dr. Ioan Raicu
  – Contact: iraicu@eecs.northwestern.edu, 847-491-8163
  – Office Hours:
    • Time: Tuesday/Friday, 2:00PM - 3:00PM
    • Location: TECH M384

• Teaching Assistants:
  – Martin Luessi
    • Email: m-luessi@northwestern.edu
    • Office Hours:
      – Time: Wednesday/Thursday, 2:00PM - 3:00PM
      – Location: TECH M472
  – Fan Jiang
    • Email: fanjiang2008@u.northwestern.edu
    • Office Hours:
      – Time: Monday, 2:00PM - 4:00PM
      – Location: TECH M472
• This class covers a variety of topics:
  – Introduction to UNIX
  – Introduction to C++
  – Object-oriented programming
  – Control structures
  – Functions
  – Abstract data types
  – Pointers
  – Classes

• Required for computer science majors
• CS 111 or equivalent
• You should already understand basic concepts, such as:
  – variables and variable scope,
  – functions and function parameters,
  – iteration,
  – recursion,
  – simple data structures
• C++ How to Program, 6th (or 7th) edition, by Deitel and Deitel
Course Topics

- Introduction to C++
- Introduction to Makefiles
- Variables, types, and expressions
- C++ classes and control structures
- Functions
- Arrays and vectors
- Pointers
- Operators
- Classes
- Search and sorting
- Data structures
- Streams and files
- Strings
• Wilkinson Lab
• T-Lab machines
  – If you don’t have accounts on these computers, but would like access, please email me iraicu@eecs.northwestern.edu to request access
Software

• GNU C++
• Cygwin
• CppUnit
• MacPorts
• Makefiles
• Code::Blocks
• XCode
• Other:
  – http://www.eecs.northwestern.edu/~iraicu/teaching/E
    ECS211/links.html
• 8 programming assignments
  – Program 3 through 8 will be incremental
• Generally will have 1 week to complete
• Must be completed individually
Mailing lists

- http://www.eecs.northwestern.edu/mailman/listinfo/eecs211
- Primary communication mechanism outside the classroom
- Post questions on the material or assignments, and to answer posted questions
- Posting to the newsgroup rather than emailing the staff will often get you an answer much faster
- If you need help on an error message, try to write a small program that replicates the error, and post that
- Never post complete answers to homeworks, even broken ones.
- You are encouraged to post useful or interesting links that are relevant to the class may also be posted
Quizzes and Exams

• Quiz 1
  – Friday, 04-09-2010

• Quiz 2
  – Friday, 04-23-2010

• Quiz 3
  – Friday, 05-07-2010

• Quiz 4
  – Friday, 05-21-2010

• Final Exam
  – Week of 06-07-2010
• Final grade composed of:
  – 8 Programming Assignments – 50%
  – 4 In-class quizzes – 25%
  – 1 Final – 25%

• General grade guidelines:

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<tr>
<th>Grade</th>
<th>Percentage Range</th>
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<tr>
<td>A</td>
<td>93% - 100%</td>
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<td>A-</td>
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Getting Help

• Participate in class and ask lots of questions.
• Post to the mailing list. Posting your questions there will usually get you an answer much faster than if you email them to us, or wait until class/office hours.
• Email or visit the instructor. When emailing, always put "[EECS211]" in the Subject line, followed by a short but clear topic.
• Check the course web pages for updates.
• Study early and start assignments early. The last minute is the worst time to need help.
Tardiness

• You will generally have 1 week to complete most assignment
• They will be due
  – 11:59PM on Monday nights
  – There will be a 1 hour grace period
• Late assignments will receive 0
• Your lowest grade from the 8 programming assignments will be dropped
You must never copy solutions from any source or give your homework to another student.

Cheating will result in a failing grade for the course.

University policy requires that instances of cheating be reported to the Dean.

You are allowed and encouraged to discuss the programming assignments

- This means asking for suggestions when you are stuck and discussing examples that are similar but not part of the exercise.
- You must never share code or solutions to the assigned problems.
Write me:
  – iraicu@eecs.northwestern.edu

Call me:
  – 1-847-491-8163

Write the TAs:
  – m-luessi@northwestern.edu
  – fanjiang2008@u.northwestern.edu

Mailing list
  – http://www.eecs.northwestern.edu/mailman/listinfo/ee
    cs211